

CURRICULUM VITAE

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Distinguished Professor, Departments of Bioengineering, Materials Science
and Engineering, and Pharmaceutics;
retired 2012; Emeritus Professor

Marital Status: Married, two children Birthdate: July 13, 1941

B.S., Materials Science, San Jose State University, 1965;
Ph.D., Metallurgy and Materials Science, University of Denver, 1969

Memberships (former):

American Association for Advancement of Science (AAAS)
American Association of Physics Teachers (AAPT)
American Chemical Society (ACS)

Honors:

Outstanding Utah Engineering Educator - 1977
Ebert Prize, Academy of Pharmaceutical Sciences - 1978
Distinguished Research Award, University of Utah - 1981
Clemson Award for Contributions to Literature, Biomaterials Soc. and Clemson
Univ. 1985
Patent Prize, College of Engineering, University of Utah - 1987
Polymer Science Pioneers, Polymer News 16 (12) 367-8, 1991
Fellow, American Institute of Medical and Biological Engineering (AIMBE), 1991
Governor's Medal for Science and Technology, 1992
Distinguished University Service Award in Biological Sciences, Utah Academy of
Sciences, Arts, and Letters, 1992
Faculty Service Award, College of Engineering, University of Utah, 1993
University Professor, Liberal Education Program, University of Utah, 1994-95
Honorary Member, Materials Research Society of India, 1996
Surface in Biomaterials Fdn Award for Excellence in Surface Science, 1995
Honorary PhD Degree, Uppsala University, Sweden May, 2000
Distinguished Professor, Univ. of Utah
Prolific Inventor, Univ. of Utah, 2011

Academic and Administrative Experience:

1998-8/2000	Co-Chair, Department of Bioengineering
1998-99	Interim Chair, Department of Pharmaceutics
1988-1991	Chairman, Department of Bioengineering
1978-Present	Professor, Depts of Bioengineering, Materials, and Pharmaceutics
7-83-9-87	Dean, College of Engineering, University of Utah

1969-1982 Asst Prof, Assoc Prof, Prof.

Professional Activities:

Editor-in-Chief, Journal of Bioengineering, Pergamon Press, 1977-1979.
Visiting Professor, Department of Materials Science, Free University of Amsterdam, The Netherlands, August 1974.
National Academy of Sciences Exchange Scientist at the Institute of Macromolecular Chemistry, Prague, Czechoslovakia, August 1977, and February 1979, subsequent visits in 1987 and 1988.
Visiting Professor, University of Coimbra, Portugal, Spring, 1979; m Fulbright Award.
Visiting Lecturer, Korea Advanced Institute of Science and Technology, Seoul, Korea, June 1980 and May 1981.
Visiting Professor, University of Paris-North, February, 1988, July 1998.
Visiting Professor, Beijing University, Department of Chemistry, May, 1988.
Several National Academy of Sciences, National Academy of Engineering, and Institute of Medicine Committees and Panels.
Governor's Task Force on the Biomedical Industry in Utah, 1991-1994
Member, Board of the Hansen (now Clark) Planetarium, Salt Lake City 1991 - 1998.
Member, Utah Science Center Authority Board, 1992
Vice President for Public Policy, American Institute of Medical and Biological Engineering, 1992-1994
Program Chair, The Utah Science Center project, 1992-1997 and 2000.
Chairman, Biomedical Engineering Society National Meeting, Salt Lake City, Utah, Oct. 1992
Chairman, AIMBE Annual Event, The Future of Health: The Roles of Medical and Biological Engineering, Washington, D.C., March, 1993
Panel for Chemical Science and Engineering, National Research Council, Commission on Physical Sciences, Mathematics, and Applications, 1993-1995.
Council, National Center for Research Resources (NCRR), NIH (1999-2003)

University Service (at various times):

Community Relations Committee
Writing Program Board
Graduate Council
Faculty Senate
Patent and Technology Transfer Committee
Council of Academic Deans
Academic Policy Advisory Committee
President Gardner's Commission on the Future of the University of Utah
University Research Committee
Faculty Committee on Community and Government Relations
Liberal Education Council
Undergraduate Council
Presidential Commission on University Service

Patents:

- U.S. Patent 7,473,244 B2, Jan. 6, 2009. "Active Needle Device with Integrated Functionality," (B. Frazier, JD Andrade, D Bartholomeusz, J Brazzle)
- U.S. Patent 6,501,549, Dec. 31, 2002, "Method of Measuring Chemical Concentration Based on Spatial Separation and Resolution of Luminescence," (J.D. Andrade, C-Y Wang, V. Hlady, P. M. Triolo, R. J. Scheer).
- U.S. Patent 5,075,400, December 24, 1991, "Polymer Supersurfactants for Protein Resistance and Protein Removal," (J.D. Andrade, J. Kopecek, J-H. Lee).
- U.S. Patent 5,869,349, Feb. 9, 1999, "Immobilization of Acid-Treated Antibodies..." (with J-N Lin and I-N Chang).
- U.S. Patent 5,135,876, August 4, 1992, "Method and Apparatus for the Regulation of Complex Binding," (J.D. Andrade and J. Herron).
- U. S. Patent 4,648,714 March 10, 1987, "Molecular Gas Analysis by Raman Scattering in Intracavity Laser Configuration," (R. E. Benner, J. D. Andrade, R. A. VanWagenen, D. R. Westenskow
- U.S. Patent 4,508,606, April 2, 1985, "Treating Polymer Surfaces to Reduce Friction (J. D. Andrade and P. Triolo)
- U.S. Patent 4,368,047, January 11, 1983, "Process for Conducting Fluorescence Immunoassays Without Added Labels and Employing Attenuated Internal Reflection," (J. D. Andrade, and R. A. VanWagenen)

Books:

- Science without Walls: Science in YOUR World, Simon and Schuster Publ., 1998
- Medical and Biological Engineering in the Future of Health Care, J.D. Andrade, ed., University of Utah Press, 1994.
- Artificial Organs, J.D. Andrade, et al., eds., VCH Publ., 1987.
- Dynamic Aspects of Polymer Surfaces, J. D. Andrade, ed., Plenum Press, 1988.
- Surface and Interfacial Aspects of Biomedical Polymers,
Vol. 1 - Surface Chemistry and Physics (6 chapters authored)
Vol. 2 - Protein Adsorption (2 chapters authored)
J. D. Andrade, ed., Plenum Press, 1985.
- Hydrogels for Medical and Related Applications, J. D. Andrade, ed., Amer. Chem. Soc. Symp. Series No. 31, (1976) (7 chapters authored)

Papers—see www.joeandrade.org

2008:

- AL-Sheikh YT, Andrade JD, Millington J, Wong A, [Review of designing an information processing ware for a diabetic chip](#). J Diabetes Sci Technol 2008 Sep;2(5):873-81
- Al-Sheikh YT, Andrade JD, Zhang K, [Diabetes information portal: a demonstration project for the national health information infrastructure](#). J Diabetes Sci Technol 2008 Jul; 2(4):739-40

2007:

- Yang X, Janatova J, Juenke JM, McMillin GA, Andrade JD, [An ImmunoChip prototype for simultaneous detection of antiepileptic drugs using an enhanced one-step homogeneous immunoassay](#). Anal Biochem 2007 Jun 15;365(2):222-9

2006:

Multi-analyte bioluminescence-based disposable ChemChips for home-based application: Update, J Andrade, D Bartholomeusz, R Davies, XY Yang, J Janatova; Prog Biomedical Optics and Imaging, 7 (3), SPIE, 2006. pp. 6080-45
Advanced Biomedical and Clinical Diagnostic Systems IV, edited by Gerald E. Cohn, Wanen S. Grundfest, David A. Benaron, Tuan VoDinh, Proc. of SPfE Vol. 6080, (2006)

Optical enhanced luminescent measurements and sequential reagent mixing on a centrifugal microfluidic device for multi-analyte point-of-care applications
DA Bartholomeusz, RH Davies, JD Andrade
Ibid., pp. 6080-46

2005:

Homogeneous enzyme immunoassay modified for application to luminescence-based biosensors. Yang X, Janatova J, Andrade JD.
Anal Biochem. 2005 Jan 1;336(1):102-7.

Xurography: Rapid Prototyping of Microstructures Using a Cutting Plotter,
DA Bartholomeusz, RW Boutté, and JD Andrade, J Microelectromechanical Systems, 14 (6) December 2005, pp. 1364-74.

Bioluminescence-Based Analytical Assays in Nanoliter Volumes,
DA Bartholomeusz, RH Davies, TSM Yang, and JD Andrade
ISBC 2004: Bioluminescence and Chemiluminescence, ed A Tsuji, et al., World Scientific, 2005, pp. 233-236.

2004:

Public adventures in diabetes: personal interactivity in a modern science center, .
Al-Sheikh YT, Hardman R, Andrade JD., Diabetes Tech Ther. 2004 Feb;6(1):61-4.

Modeling of homogeneous cloned enzyme donor immunoassay.
Jeon SI, Yang X, Andrade JD., Anal Biochem. 2004 Oct 1;333(1):136-47.

2003:

Personal Sensors for the Diagnosis and Management of Metabolic Disorders,
R. Davies, DA Bartholomeusz, and JD Andrade,
IEEE Engrg in Med. and Biology Mag., Jan/Feb. 2003, 32-42

For cost-reducing technologies, knowing markets is to change them.
Huefner RP, Waitzman N, Andrade JD, Kern SE.
IEEE Eng Med Biol Mag. 2003 Jan-Feb;22(1):26-31.

2002:

Photodetector Calibration Method for Reporting Bioluminescence Measurements in Standardized Units, D Bartholomeusz and JD Andrade, in PE Stanley and LJ Kricka, eds., Bioluminescence and Chemiluminescence, World Scientific, 2002, pp. 189-192.

Lactate Assay based on Bacterial Bioluminescence: Enhancement, Dry Reagent Development, and Miniaturization, RH Davies, JW Corry, JD Andrade,

Ibid., pp. 441-444.

Enzyme Kinetics Model of the Bacterial Luciferase Reactions for Biosensor Applications, Y Feng, RH Davies, JD Andrade, Ibid., p. 88.

2001:

Optimizing biosensor design with computer modeling: a case study involving creatine, J.W. Smith, R.H. Davies, J.D. Andrade, and R.A. Van Wagenen, in James F. Case and Bruce H. Robison, eds., *Bioluminescence and Chemiluminescence*, Wiley, 2001, pp. 309-312.

Stabilization of Firefly Luciferase Activity against Oxidation with Antioxidants, RH Davies, RA Van Wagenen, and JD Andrade, Ibid., pp. 161-164.

Eu J-Y and J.D.Andrade Properties of Firefly Luciferase Immobilized through a biotin carboxyl carrier protein domain, *Luminescence*, 16 (2001), 57-63

2000:

Bioluminescent Based ChemChip For Point-Of-Care Diagnostics, Bartholomeusz D., Andrade J., Frazier B. 1st annual International IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine & Biology, October 12-14, 2000, Palais des Congres, Lyon France, IEEE Catalog: 00EX451, ISBN: 0-7803-6603-4, pg 602-606

Active Microneedles With Integrated Functionality, Brazzle J., Bartholomeusz D., Davies R., Andrade J., Wagenen R., Frazier B., Solid State Sensors and Actuators Conference, Transducers Research Foundation, Hilton Head S.C. USA, June 4-8, 2000

Bioluminescence Sensor for Galactose-1-Phosphate: Preliminary Study
J-Y Eu and J. Andrade Inter. Conf. On Biosensors, San Diego, May, 2000.

Bioluminescence as a Classroom Tool for Scientist Volunteers M. Hammer and J.D. Andrade, *Methods in Enzymology*, 305 (2000) 660-677.

Phytic Acid as an Efficient Low MW Displacer...Proteins, Q-L Luo and J.D.Andrade, *J. Chrom. B.*, 741 (2000) 23-29.

1999:

Toward Dollar Devices for Measuring Metabolic Biochemistry, J.D. Andrade, C.Y. Wang, D.-J. Min, et al. in S.P. Sawan and G. Manivannan, eds, *Anti-microbial, Anti-infective Materials*, Technomic Publishing Co., 1999, pp 317-329

Bioluminescence Assay for Galactokinase Activity, J. Eu and J.D. Andrade, *Bioluminescence and Chemiluminescence: Perspectives for the 21st Century*, A.Roda, et al., eds., Wiley, 1999, pp. 489-492.

Developing a Biosensor for L-Phenylalanine based on Bacterial Bioluminescence, D.J.Min, R.J.Stewart, and J.D.Andrade, Ibid., pp. 520-523

Specific Immobilization of invivo Biotinylated-Bacterial Luciferase and FMN:NAD(P)H Oxidoreductase,
D.J.Min, J.D.Andrade, and R.J.Stewart, *Anal. Biochem.*, 270 (1999) 133-139.

Homogeneous Bioluminescence Assay for Galactosuria: Interference and Kinetic Analysis,

J-Y Eu, C-Y Wang, and JD Andrade, *Anal. Biochem.*, 271 (1999) 168-176.

1998:

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Cooperative adsorption of Proteins onto Hydroxyapatite," Q. Luo and J.D. Andrade, *J. Colloid Interface Science* 200 (1998) 104-113.

Thin-layer ion-exchange chromatography of proteins," Q. Luo, J.D. Andrade, K. Caldwell, *J. Chromatography A*, 816 (1998) 97-105.

1997

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W.J. Hastings, L.J. Kricka, P.E. Stanley, eds, *Bioluminescence and Chemiluminescence: Molecular Reporting With Photons*, Wiley (1997) 188-191

Behavior of Model Proteins, Pretreated in Urea and/or Dithiothreitol, at Air/Solution Interfaces,

D. J. Min and J.D. Andrade, *J. Colloid Interface, Sci.* 197 (1998) 43-47.

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W.J. Hastings, L.J. Kricka, P.E. Stanley, eds, *Bioluminescence and Chemiluminescence: Molecular Reporting with Photons*, Wiley (1997) 224-227.

Minimizing Interferences in Multi-Element Analysis by ICP-MS, C.-S. Hsiung, J.D. Andrade, R. Costa, and K.O. Ash, *Clinical Chemistry* 43 (1997) 2303-2311.

Preliminary Study of the Optimum Conditions for a Lactate Sensor Based on Bacterial Bioluminescence," D.J. Min and J.D. Andrade) in W.J. Hastings, L.J. Kricka, P.E. Stanley, eds, *Bioluminescence and Chemiluminescence: Molecular Reporting with Photons*, Wiley (1997) 253-256.

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C-Y Wang, S. Hitz, J.D. Andrade, and R. Stewart, *Analytical Biochem*, 246 (1997) 133-139.

1996

Direct Reading Biosensors: Analytical Chemistry Without Instruments," *Proc. Intern. Symp.*

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1996, pp.

Proteins at Interfaces: Principles, Problems, and Potential, chapter in Interfacial Behavior of Bioproducts, J. Brash and P. Wojciechowski, eds., Dekker, 1996, pp. 19-56.

1995

Applying Intelligent Materials for Materials Education: The Labless Lab™, Proc. Second Int. Conf. Intellig. Matls., R. Scheer and J. Andrade, Technomic Publ., 1994, pp. 35-43.

Adsorption Mechanism of Acid Pre-treated Antibodies on dichlorodimethylsilane-treated Silica Surfaces, I-N Chang, J-N Lin, J.D. Andrade, and J.N. Herron, J. Colloid Interface Sci., 174, (1995), 10-23.

Photo-affinity Labeling of Antibodies for Applications in Homogeneous Fluoroimmunoassays, I-N Chang, J-N Lin, J.D. Andrade, and J.N. Herron, Anal. Chem., 67, (1995), 959-966.

Fibrinogen: Its Structure and Surface Properties, L. Feng and J.D. Andrade, in T. Horbett and J. Brash, eds., Proteins at Interfaces - II, Amer. Chem. Soc. Symp. Series (1995).

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1994

Using Novel Biological Phenomena to Enhance Integrated Science Education: Bioluminescence, J.D. Andrade, M. Lisonbee, D. Min, in A. Campbell, et al., Biolum. and Chemilumin: Fundamentals and Applied Aspects, Wiley, 1994,.

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Compression of Polyethylene Glycol Chains Grafted onto Silicon Nitride Surface as Measured by Scanning Force Microscopy, A.S. Lea, J.D. Andrade, and V. Hlady, Colloids and Surfaces, A, 93, (1994) 349-357.

Even Unintelligent Polymers Have Intelligent Surfaces: Polymer Surface Dynamics, J. Intelligent Material Systems (1994).

Protein Adsorption on Low Temperature Isotropic Carbon, L. Feng and J.D. Andrade:
I. Protein Conformational Change Probed by DSC, J. Biomed. Materials Res. 28 (1994) 735-743.

II. Effects of Surface Charge of Solids, J. Colloid Interface Sci., 166, (1994) 419-426.

III. Isotherms, Competitivity, Desorption, and Exchange of Human Albumin and Fibrinogen, *Biomaterials* 15 (1994) 323-333

IV. Competitive Adsorption Studied by 2-D Gel Electrophoresis, *Colloids & Surfaces*.
 B. *Biointerfaces*, 4 (1995) 313-325.

V. How is it Related to Blood Compatibility? *J. Biomater.Sci.Polymer Ed.*, 7 (1995) 439-452.

1993

Analysis of Steric Repulsion Forces in AFM with PEO in Aqueous Media," S-I Jeon and J.D. Andrade, *Bull Korean Chem Soc.* 14 (1993) pp. 352-356.

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Using Bioluminescence for Integrated Science Education, J.D. Andrade, J. Tobler, M. Lisonbee, D. Min, in A.A. Szalay, et al., eds., *Bioluminescence and Chemiluminescence: Status Report*, Wiley (1993) pp. 69-73.

Interfacial Behavior of Firefly Luciferase, C.Y. Wang and J.D. Andrade, *Ibid.*, pp. 99-103.

Measurement of Steric Exclusion Forces with AFM," A.S. Lea, J.D. Andrade, and V. Hlady, in P. Tong, ed., *Colloid-Polymer Interactions*, ACS Symp. Series #532, 1993, pp. 266-279.

Plasma Protein Adsorption on Model Biomaterial Surfaces, V. Hlady, J.D. Andrade, C-H Ho, L. Feng, K. Tingey, *Clin. Materials*, 13 (1993) pp. 85-93.

Surface Atomic Structures of Biomedical Carbons Observed by Scanning Tunneling Microscopy, L. Feng and J.D. Andrade, *J. Biomedical Materials Research*, 27 (1993) pp. 177-182.

1992

Proteins at Interfaces: Principles; Multivariate Aspects; Protein Resistant Surfaces; and Direct Imaging and Manipulation of Adsorbed Proteins, J.D. Andrade, V. Hlady, A-P Wei, C-H Ho, A.S. Lea, S.I. Jeon, Y.S. Lin, E. Stroup, *Clin Materials*, 11 (1992) 67

Adsorption of Complex Proteins at Interfaces, *Pure.Appl.Chem.* 54 (1992) 1777-81.

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Manipulation of Proteins on Mica by Atomic Force Microscopy, A. S. Lea, A. Pungor, V. Hlady, J. D. Andrade, J. N. Herron, E. W. Voss, Jr., *Langmuir* 8 (1992) 68.

Immuno-Biosensors: The Clinical Chemistry and Coagulation Laboratory on a Chip, J. D. Andrade, J-N Lin, V. Hlady, J. Herron in Y. Sezai, ed., *Artificial Heart: Biomation in the 21st Century*, Saunders, 1992, p. 89.

Bioengineering and the Costs of Health Care, Abstracts, First Inaugural Meeting American

Inst. Medical and Biological Engineering, Feb. 24-25, 1992, Washington, DC.

Culture of Pyrocystis lunula in Sealed Polyethylene Bags, J. Tobler, J.D. Andrade, Utah Academy of Arts and Sciences, May, 1992.

The Steric Repulsion Properties of Polyethylene oxide, S.I. Jeon, J.D. Andrade, Bull. Korean Chemical Society, 13 (1992) 245.

1991

What, Me Worry? Bioengineering and the Costs of Health Care?, J.D. Andrade, Ann. Biomed. Engrg 19 (5) (1991) 91-15.

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The Oregon Priorities: A Bioengineering Resource, Ibid, #91-18.

Culture of Dinoflagellates in Non-Traditional Media," J. Tobler, J. D. Andrade, abstract, Utah Academy of Arts and Science, May, 1991.

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X-F Wang, J.D. Andrade, SPIE Proc., 1519 (1991).

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ment,
K. G. Tingey, J. D. Andrade, Langmuir 7 (1991) 2471.
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S-I Jeon, J-H Lee, J. D. Andrade, and P. G. de Gennes, J. Colloid Interface Sci-
ence
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S. I. Jeon and J. D. Andrade, J. Colloid Interface Sci. 142, (1991) 159-166.
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J. D. Andrade, Langmuir 7, (1991), 218-222.
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tion 2-D
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Bonds,
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Total Internal Reflection Excited Antigen Fluorescence and Charge-Coupled
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of Immunoglobulin G to Silica Surfaces, P. Kopeckova, J. Kopecek, and
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J. Andrade, J. Ives, J. Lin, *SPIE Proc* 1067 (1989) 44-52.
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Containing Polymeric Carriers of Chlorin e₆ and Their Photodynamic Effect of
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7. Y. K. Sung, Ph.D.; Materials Science and Engineering, December 1977.
Dissertation Title: Interaction of Water with Hydrophilic Methacrylate Polymers. Emeritus Professor, Department of Chemistry; he was Dean of the Faculty, Dong Guk University, Seoul, Korea.
8. Lee M. Smith, Ph.D.; Materials Science and Engineering, April 1979.
Dissertation Title: Cell Adhesion as Influenced by Substrate Surface Properties. Dr. Smith is President of Process Instruments, Inc. in Salt Lake City, Utah.

9. Robert N. King, Ph.D.; Materials Science and Engineering, January 1980.
Dissertation Title: Surface Characterization of Synthetic Polymers for Biomedical Applications. Dr. King is now with Southwall Technologies in CA.
10. Sachiko Hattori, Ph.D.; Materials Science and Engineering, May 1980.
Dissertation Title: Cell Interactions with Charged Methacrylate Copolymers. Dr. Hattori lives in Mountain View, California.
11. Dennis L. Coleman, Ph.D.; Pharmaceutics, July 1980.
Dissertation Title: In Vitro Blood-Materials Interactions: A Multiparameter Approach. Dr. Coleman is retired and lives in Salt Lake City.
12. B. Zdasiuk, M.S.; Bioengineering, July 1980.
Dissertation Title: Total Internal Reflection Fluorescence Studies of Plasma Protein Adsorption on Quartz. Ms. Zdasiuk died in September 1980.
13. Phillip Triolo, M.S., Bioengineering, July 1980.
Dissertation Title: Surface Modification and Evaluation of Catheter Materials. Dr. Triolo completed a Ph.D. in Bioengineering with Prof. Sung Wan Kim and is owner-consultant Triolo Associates in Salt Lake City, Utah.
14. Reed Quinn, M.S.; Bioengineering, August 1981.
Dissertation Title: Insulin Aggregation and Adsorption. Dr. Quinn completed medical school and is a surgeon in Pennsylvania.
15. Ron Stoker, M.S.; Bioengineering, August 1981.
Dissertation Title: Adsorption of Plasma Fibronectin on Quartz and Glass Surfaces. Mr. Stoker was with Utah Medical Products, Salt Lake City, Utah.
16. J. Pierce, M.S.; Bioengineering, June 1982.
Dissertation Title: Adsorption of Myoglobin and Hemoglobin onto Alkyl Agaroses. Mr. Pierce is an independent consultant living in Park City, UT
17. Steven Rockhold, M.S.; Bioengineering, December 1982. Dissertation title: Monitoring Protein Adsorption by Extrinsic Total Internal Reflection Fluorescence; A First Stage Sensor Miniaturization Using Fiber Optics. Mr. Rockhold was with Hewlett-Packard Corp., Palo Alto, California.
18. David E. Dong, Ph.D.; Pharmaceutics, June 1983.
Dissertation Title: Low Density Lipoprotein Adsorption onto Selected Biomedical Polymers. Dr. Dong is now with Swedish Hospital in Issaquah WA.
19. Mark Davis, M.S.; Bioengineering, June 1983.
Dissertation Title: Surface Treatment of Catheters for Friction Reduction. Mr. Davis is with Mini-Med Technology, in Sylmar, CA.
20. J. Chen, M.S.; Bioengineering, June 1984.
Dissertation Title: Adsorption of Oxy and Deoxy Hemoglobin onto Selected Surfaces. Mr. Chen was with Allergan Pharmaceuticals in Los Angeles, CA.
21. Joann Hansen, M.S.; Bioengineering, March 1985.
Dissertation Title: XPS Analysis of Lysozyme Adsorption onto Glass Surfaces

Ms. Hansen completed her MD studies and was employed at the Univ of Utah.

22. Peter Suci, M.S.; Bioengineering, October 1984.
Dissertation Title: Variable Angle Total Internal Reflection Fluorescence.
Dr. Suci completed the Ph.D. in the Department of Bioengineering (M. Reichert, supervisor). After postdoctoral fellowships with Drs. Hervet and de Gennes at the College de France, Paris and with H. Ringsdorf, Mainz, he is at Montana State U
23. K. Newby, M.S.; Bioengineering. October 1984.
Dissertation Title: A Remote Interfacial Chemical Sensor Using a Single Multimode Optical Fiber. Mr. Newby was with the Eastman Kodak Co.
24. Dan Reinecke, M.S.; Bioengineering, June 1985.
Dissertation Title: Monitoring Protein Adsorption by Gamma Photon Detection An In Situ Device to Calibrate in Total Internal Reflection Fluorescence System
Mr. Reinecke was working in the Seattle area.
25. R. Lawry, M.S.; Bioengineering, July, 1985.
Dissertation Title: Swelling Studies of Selected Hydrogels in Solutions and Electric Fields. He was President of Scar Reduction Tech in Ojai, California.
26. Won Kim, Master of Engineering; Materials Science and Engineering, Spring, 1986. Mr. Kim is now with the Sam Yang Co. in Seoul.
27. Suzanne Winters, Ph.D.; Pharmaceutics, July 1986
Dissertation Title: Protein Interaction with Immobilized Heparin Surfaces.
Dr. Winters was with USTAR, a research initiative via the Gov. Office of Economic Development, and earlier the Science Advisor to UT Gov. M. Leavitt
28. Chen-Ze Hu, Ph.D.; Materials Science and Engineering, August 1986.
Dissertation Title: Pyrolyzed Polyimide. Dr. Hu is now an entrepreneur in Taiwan.
29. Jana Rickel, M.S.; Bioengineering (completed).
Dissertation Title: Lipoprotein Interactions with Biomedical Polymers.
Ms. Rickel was living in the Seattle area.
30. S. Y. Gweon, Master of Engineering; Materials Science and Engineering, 1986.
Project Title: Light-induced Conformational Change in Polymers with Photochromic Side Chains. Mr. Gweon completed his Ph.D. in Materials Science (Dr. W. Bascom) and was with Powderject in Fremont, Calif.
31. Jinn-Nan Lin, Ph.D.; Materials Science and Engineering, April 1988.
Dissertation Title: Immuno-Sensors Based on Evanescent Fluorescence.
Dr. Lin was with the Azure Institute in San Diego, California
32. Joung-Man Park, Master of Engineering; Materials Science and Engineering December 1987. Project Title: Dynamics of Alkylated Surfaces. Mr. Park completed his Ph.D. at Washington State U 1992 and is Prof. Gyeongsang National U. Jinju, Korea.
33. Jin-Ho Lee, Ph.D.; Materials Science and Engineering, October 1988.
Dissertation Title: Polyethylene Oxide - Block Copolymer Surfactants.
Professor, Hannam University, Chungnam, Korea.

34. David Horsley, Master of Engineering; Bioengineering, March 1988.
Dissertation Title: Lysozyme Adsorption. (Jointly supervised by Prof. J. Herron)
Dr. Horsley completed his medical studies at the University of Utah.
35. P. Y. Yeh, M.Sc.; Materials Science and Engineering, October 1989.
Dissertation Title: Firefly Luciferase at Interfaces. Mr. Yeh earned the Ph.D. in
Pharmaceutics, U of Utah and now works in the pharmaceutical industry.
36. Aiping Wei, M.Sc.; Bioengineering, Fall, 1990.
Dissertation Title: Adsorption of Model Proteins. (Jointly supervised by J.
Herron). Mr. Dr. Wei completed his Ph.D. in Bioengineering under Herron and is
now at Agri-Analysis in Davis, California
37. C. H. Ho, M.Sc.; Materials Science and Engineering, Fall, 1990.
Title: Competitive Adsorption of Heparin-Binding Plasma Proteins
Mr. Ho completed the Ph.D. program in Materials Science and Engineering,
University of Utah and is now at Frezenius, Inc. in Ogden, Utah.
38. Kevin Tingey, Ph.D. Materials Science and Engineering, Feb., 1995.
Title: Interfacial Aspects of Biomedical Polyetherurethanes
Dr. Tingey was on the R&D staff at Gore Medical in Flagstaff, AZ
39. L. Feng, Ph.D. Materials Science and Engineering, March, 1993.
Title: Interfacial Aspects of the Interactions Between Carbons and Plasma
Proteins. Dr. Feng was with Bisco Corp.
40. S. Lea, Ph.D. Bioengineering, March, 1993.
Title: Steric Exclusion Forces and Protein Imaging using the Atomic Force
Microscope. Jointly supervised with V. Hlady, Dr. Lea was a staff scientist at
Battelle Labs, Richland, Washington.
41. I. N. Chang, Ph.D., Materials Science and Engineering, December 1993.
Title: Immunoglobins at Interfaces (Jointly supervised by J. Herron). Dr. Chang is
in Taiwan.
42. C.-Y. Wang, Ph.D., Bioengineering, September, 1996.
Title: Firefly Luciferase at Interfaces and in Biosensors. Dr. Wang is
Assistant Professor, Tatung University, Taipei, Taiwan.
43. C.-H. Hsuing, Ph.D., Materials Science and Engineering, Dec., 1997.
Title: Trace Metals Analysis of Biosensor Components
Dr. Hsiung was with Lam Research Co., Ltd. in Taiwan.
44. D-J Min, Ph.D., Materials Science and Engineering, October, 1999
Title: Bacterial Luciferase in Biosensor Applications
Dr. Min was a research scientist at Northwestern University.
45. Q. Luo, Ph.D., Materials Science and Engineering, May, 2000
Title: Simplifying and Enhancing Chromatographic Separations of Proteins
Dr. Luo is now a researcher at Rockefeller Univ.
46. C. Eu or Yu, Ph.D., Materials Science and Engineering, Nov. 2000

Title: Bioluminescent Assays for Galactose and Galactose-1-Phosphate
Dr. Eu is Assistant Professor, Dept. of Bioengineering, Tatung Univ, Taiwan

47. H. Feng, Materials Science, MSc about 2004?
Title: Luminescence-Based Sensors of Glutathione
Harvey Feng was a PhD Candidate in Pharmaceutics, U of Utah
48. R. Davies, Bioengineering, PhD Spring, 2005 Title: Luminescent Assays For Assessment Of Metabolism and Renal Function: Towards A Multi-Analyte ChemChip. Dr. Davies works in the Seattle area
49. Rashmi Prasad, MSc, Bioengineering, August, 2005 Title: Measurement of Biological Signals As A Science Center Learning Experience. Ms. Prasad was employed by Phillips Medical Systems in Burlington, MA.
50. D. Bartholomeuz, Bioengineering, PhD June, 2006 Title: Development of a Bioluminescence-Based Multi-Analyte Biosensor: Fabrication and Instrumentation; Dr. Bartholomeusz is now a research scientist in San Diego.
51. P. Mohan, Bioengineering, MSc Jan. 2006 Title: Towards A Renal Chip - Metabolites Related To Chronic Renal Failure. Ms Mohan entered the PhD program in Bioengineering
52. Moses Yang, ME. Bioengineering Title: Towards The Development Of On-Board Calibration For Luminescent Based Biosensors; Lt. Yang serves with the US Marines and works in dentistry.
53. Xiaoyun Yang, Bioengineering, PhD Bioengineering, Sept. 2006 Title: Towards the Development of an ImmunoChip for Anti-epileptic Drugs
Dr. Yang is now employed by Bio-Rad in Benecia, CA
54. Youssef Al-Sheikh, PhD. Physics, May, 2007. Title: Information Ware Development for a Point-of-Care, Clinical Chemistry Device
Dr. Al-Sheikh is now working in the Phoenix area.
55. J. Zhang, Ph.D. Materials Science and Engineering, pending.
Title: Protein-Resistant Surfaces Via Cellulosic Polymer Coatings.
Ms Zhang successfully defended her PhD work in 2000 and her thesis was approved and signed off in 2003, but was not formally accepted by the U of Utah as she did not complete formal copyright permissions for her figures.
She now lives in Florida.